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动物分类学报

EIGHT NEW SPECIES OF SALTICIDS FROM CHINA (ARANEAE, SALTICIDAE)

PENG Xian-Jin[1,2], TANG Guo[2], LI Shu-Qiang[1*]
1. Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, China
2. The College of Life Sciences, Hunan Normal University, Changsha, Hunan 410081, China

Abstract The present paper deals with 8 new species of jumping spiders from China: *Langona atrata* Peng et Li, sp. nov., *Pancorius cheni* Peng et Li, sp. nov., *Plexippoides regiusoides* Peng et Li, sp. nov., *Rhene digitata* Peng et Li, sp. nov., *Synagelides hubeiensis* Peng et Li, sp. nov., *Synagelides zebrus* Peng et Li, sp. nov., *Synagelides zonatus* Peng et Li, sp. nov. and *Yaginumaella bulbosa* Peng, Li et Tang, sp. nov. Detailed morphological characteristics and illustrations of body and copulatory organs are presented.
Key words Salticidae, new species, taxonomy, China.

1 Introduction

Jumping spiders are the most diverse taxa in the Araneae. Currently, a total of 560 genera and 5 121 species of salticids are documented (Platnick, 2008). In recent years, due to large-scale habitat destruction and fragmentation, almost all ecosystems in China have experienced severe impact. Many species had become disappeared long before they could be collected and described because of such a rapid rate of habitat destruction. One of the ways to retrieve information on species that are currently difficult to find but were once quite abundant is to examine specimens collected when their natural habitats were more intact. Recently, during examining the specimens of jumping spiders deposited in the Institute of Zoology, Chinese Academy of Sciences (IZCAS) eight new species are identified.

Specimens were examined with an Olympus SZ11 stereo dissecting microscope. Type specimens are deposited in the Institute of Zoology, Chinese Academy of Sciences in Beijing. Measurements are given in millimeter (mm). Total leg length was measured as the sum of the lengths of femur, patella + tibia, metatarsus, and tarsus.

Abbreviations. AER-anterior eye row, AL-abdominal length, ALE-anterior lateral eye, AME-anterior median eye, AW-abdominal width, CL-carapace length, CLYH-clypeus height, CW-carapace width, EFL-length of eye field, PER-posterior eye row, PLE-posterior lateral eye, Pr-prolateral, rt-retrolateral, TL-total length.

2 Taxonomy

Langona atrata Peng et Li, sp. nov. (Figs. 1-4)

Diagnosis. This new species is similar to *L. simoni* Heciak & Prozynski, 1983 (Heciak & Prószyński, 1983: 227, Figs. 24, 30-31), but differs in: 1) the epigynal hood as long as wide, with shallow depression (Fig. 3) in the new species; longer than wide, anterior margin with deep depression, almost divided the hood in two parts in *L. simoni*; 2) copulatory openings far from hood in the new species, connected to hood in *L. simoni*; 3) the course of copulatory ducts. This new species is also similar to *L. biangular* Peng & Li, 2004 and *L. maculata* Peng & Li, 2004, but differs in: 1) atrium almost longitudinal versus diagonal in 45 degree angle with epigastric furrow in *L. biangular* and *L. maculate*; 2) the course of copulatory ducts; 3) abdominal patterns.

Measurements (holotype). TL 6.40. CL 3.20, CW 2.40; AL 3.60, AW 2.40. AER 1.70, PER 1.70, ELF1.00 long, AME 0.37, ALE 0.27, PLE 0.23. CLYH 0.33. Legs: I 4.40 (1.60, 1.70, 0.60, 0.50), II 4.30 (1.50, 1.70, 0.60, 0.50), III 5.00 (2.00, 2.00, 0.90, 1.00), IV 6.20 (1.90, 2.10, 1.40, 6.20); formula 4, 3, 1, 2.

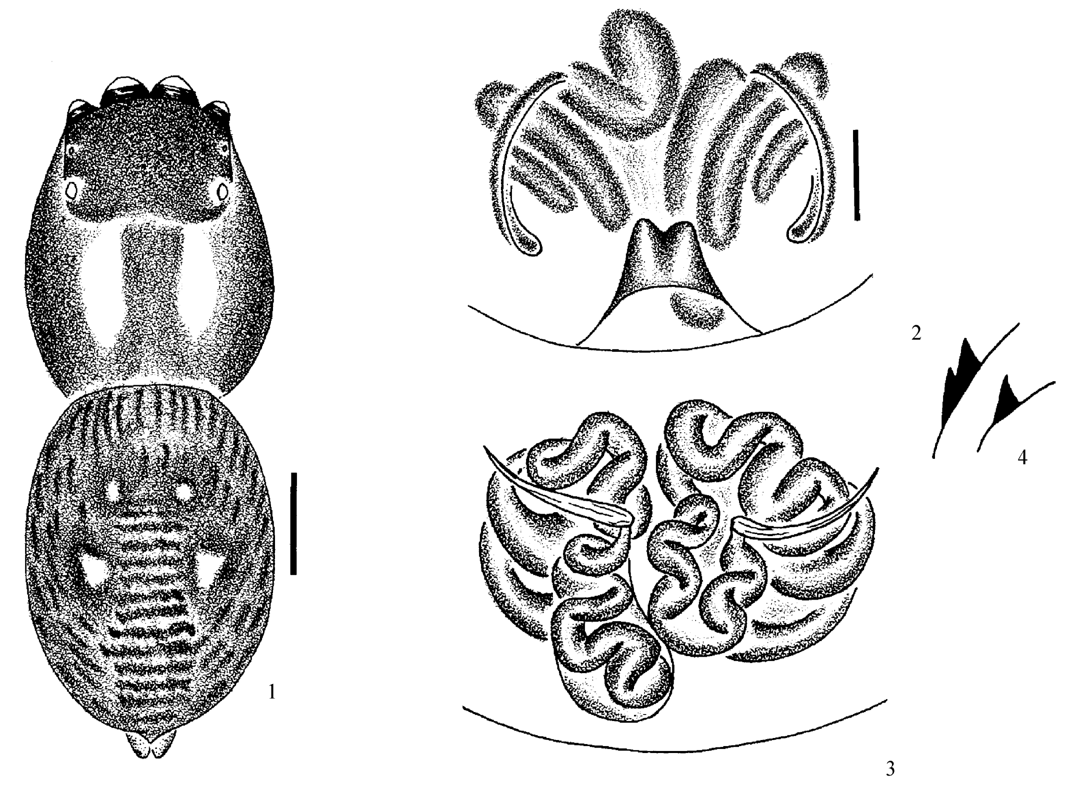
Female. Carapace blackish brown, margin and ocular area darken. Carapace with thin white and black hairs, and many long black hairs; the margin with a loop of white hairs. Anterior ocular area with short vertical claviform short hairs. Fovea, cervicle and radial grooves unclear. Sternum bottle-shaped, black, with thin white hairs. Clypeus brown, anterior rim black, bilaterally with black netted stripes, with white thin hairs and sparse black long hairs. Chelicerae blackish brown, prolateral with white thin hairs, 2 promarginal and 1 retromarginal teeth. Endites light brown, the distal light yellow with brown floss. Labium blackish brown, the distal with brown hairs. Palp and legs blackish brown, with distinct

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* Corresponding author, lisq@ioz.ac.cn

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black annuli and brown ellipsoid markings; hairs long, white and brown; spines few and long, ventral of tibiae Ⅰ and Ⅱ with 1 prolateral spine on the distal and 3 retrolateral spines, metatarsi Ⅰ without pro-and retrolateral spine, metatarsi Ⅱ pr 1-1ap, rt 0-0, metatarsi Ⅰ and Ⅱ with 2 pairs of ventral spines. Abdomen quadrate, dorsum grayish black, furnished with gray and black hairs, 2 pairs of muscular depressions distinct, the mesal with many blackish brown transverse stripes, the bilateral with blackish brown longitudinal stripes. The venter yellowish brown, with 3 grayish black longitudinal stripes, the lateral with black oblique lines; spinnerets grayish black, with gray and black long hairs.



Figs. 1-4. Langona atrata Peng et Li, sp. nov. 1. Body, dorsal view. 2. Epigynum, ventral view. 3. Vulva, dorsal view. 4. Chelicerae teeth. Scale bars: 1 = 1.0, 2-4 = 0.5.

Epigyne (Figs. 2-4). epigyne hood posteriorly, as long as wide, anterior margin with shallow depression; copulatory openings bilaterally, far from hood; copulatory ducts twist multi-circles; spermathecae also twisted complicated.

Male. Unknown.

Etymology. The specific name refers to the dark color of the body.

Holotype ♀, China, Yunnan Province, Cangshan (25°58′N, 99°52′E), 9 June 1999.

Distribution. China (Yunnan).

Pancorius cheni Peng et Li, sp. nov. (Figs. 5-8)

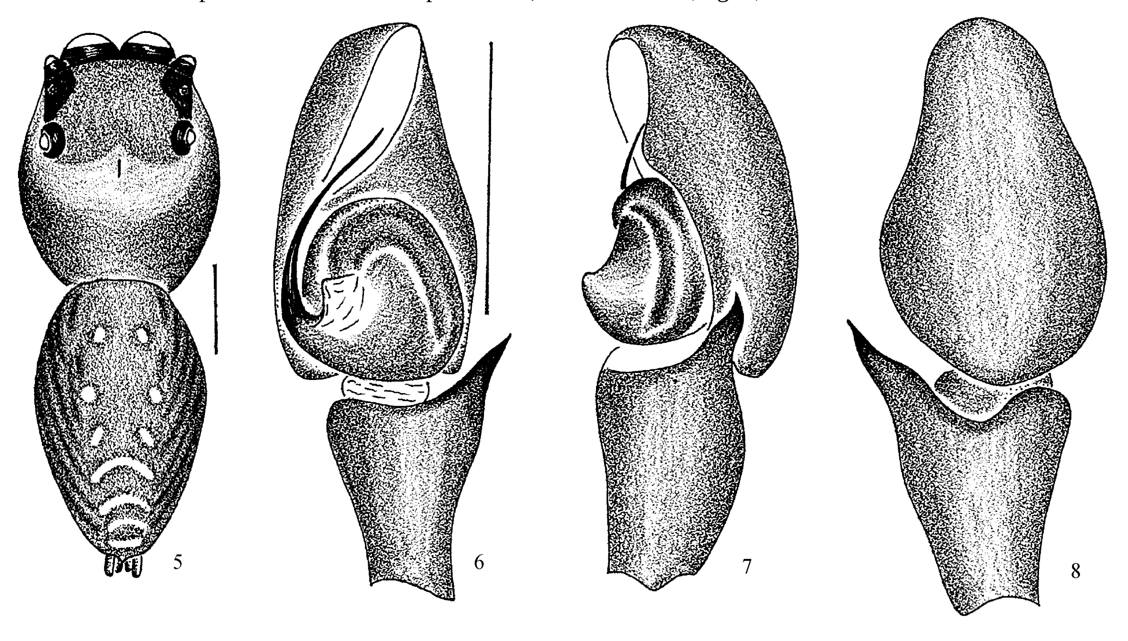
Diagnosis. This new species is similar to P. crassipes (Karsch, 1881) (Logunov & Marusik, 2001: 150), but can be separated from the latter by: 1) embolus longer, originating at the position of 9: 00 o′clock (Fig. 6) in the new species; with a wide membrane on the base, originating at the position of 11: 00 in P. crassipes; 2) body markings.

Measurements. TL: 4.70-7.00. Holotype: TL 6.20. CL 3.00, CW 2.40; AL 3.20, AW 2.00. AER 1.70, PER 1.90, ELF 1.15, AME 0.55, ALE 0.30, PLE 0.30. CLYH 0.15. Legs: Ⅰ 7.30 (2.00, 3.10, 1.40, 0.80), Ⅱ 5.35 (1.70, 2.00, 1.00, 0.65), Ⅲ 5.55 (1.85, 2.00, 1.00, 0.70), Ⅳ 5.90 (1.85, 2.00, 1.35, 0.70); formula 1, 4, 3, 2.

Male. Cephalothorax swollen, wide-oval shaped, darken brown, bases of eyes black, one lunate reddish brown marking behind ocular area. Fovea short, black, longitudinal; cervicle and radial grooves unclear, with little short white hairs and brown long hairs. Sternum shield-shaped, clothed with white, brown long hairs, median area blackish brown, margin brown, blackish brown markings corresponding to coxae of legs. Clypeus brown, clothed with blackish brown long hairs. Inferior of AME with dense white long hairs. Chelicerae blackish brown, prolateral with sparse white long hairs, the base clothed with transverse wrinkles, 2 promarginal teeth combined basally, retromargin with 1 teeth. Endites and labium blackish brown, the distal yellowish brown with grayish brown floss. Legs blackish brown, with light

brown annuli and dense blackish brown hairs, hairs on ventral of legs Ⅰ and Ⅱ brush-shaped, legs with little weak spines, tibiae Ⅰ and Ⅱ with 3 pairs of ventral spines, metatarsi of Ⅰ and Ⅱ with 2 pairs of ventral spines. Abdomen long oval, dorsum grayish black, with gray thin hairs, bilateral with many dark oblique stripes, anterior of dorsum with 3 pairs of muscular depressions, posterior with 4 light arc stripes; the venter grayish black, with 4 lines of dot-shaped spots, spinnerets grayish black, with black thin hairs.

Palpal organ. Tibial apophysis digitiform, distal sharp (Figs. 6-8); bulb swollen posteriorly (Figs. 6-7); embolus longer, originating at the position of 9: 00 o'clock (Fig. 6).



Figs. 5-8. *Pancorius cheni* Peng et Li, sp. nov. 5. Body, dorsal view. 6. Left palpal organ, ventral view. 7. Left palpal organ, retrolateral view. 8. Left palpal organ, dorsal view. Scale bars: 5 = 1.0, 6-8 = 0.5.

Female. Unknown.

Etymology. The specific name dedicates to CHEN Jun who collected the type specimens.

Holotype ♂, China, Guangxi Zhuang Autonomous Region, Napo County (23°44'N, 106°48'E), Defu Reserve, alt. 1 350 m, 19 June 2000, leg. CHEN Jun. Paratype 1 ♂, same data as holotype.

Distribution. China (Guangxi).

Plexippoides regiusoides Peng et Li, sp. nov. (Figs. 9-11)

Diagnosis. This new species is similar to *P. regius* Wesolowska, 1981 (Wesolowska, 1981: 73, Figs. 85-93), but can be separated from the latter by: 1) the atrium wide and short (Fig. 10) in the new species, rounded in *P. regius*; 2) the course of copulatory ducts; 3) markings on abdomen dorsum.

Measurements (holotype). TL 11.80. CL 5.50, CW 4.40; AL 6.30, AW 4.40. AER 2.90, PER 2.00, AME 0.95, ALE 0.45, PLE 0.45. CLYH 0.35. Legs: Ⅰ 9.50 (3.00, 4.00, 1.50, 1.00), Ⅱ 8.90 (3.00, 3.60, 1.40, 0.90), Ⅲ 9.80 (3.20, 3.50, 2.00, 1.10), Ⅳ 10.70 (3.20, 4.00, 2.30, 1.20); formula 4, 3, 1, 2.

Female. Carapace brown, with white and brown hairs, the bilateral with blackish brown longitudinal stripes; ocular area blackish brown, the anterior and the bilateral with brown long hairs; fovea long, reddish brown; cervicle and radial grooves dark. Sternum shield-shaped and brown, margin with dark brown spots corresponding to coxae of legs; hairs sparse and brown. Clypeus light brown, with white short hairs and sparse light brown long hairs. Chelicerae light brown, with long light brown hairs, 2 promarginal and 1 retromarginal teeth. Endites, labium brown, distal light brown, with grayish floss. Legs brown, coxae, trochanter, femur lighter, with blackish brown thin hairs; spines short, tibia Ⅰ with 3 pairs of ventral spines, tibia Ⅱ with 2 pro-and 3 retrolateral spines on the venter. Metatarsi Ⅰ and Ⅱ with 2 pairs of ventral spines. Abdomen (Fig. 11) dark reddish brown, clothed with short brown hairs; 2 muscular depressions reddish brown; cardiac stripes short; median area of dorsum with a wide black longitudinal stripe clothed with black hairs, 2 rows of light small dots on the stripe; bilateral yellowish brown, with 4 pairs of light yellowish brown inclined striae and few brown irregular spots. Spinnerets yellowish brown, with grayish black thin hairs.

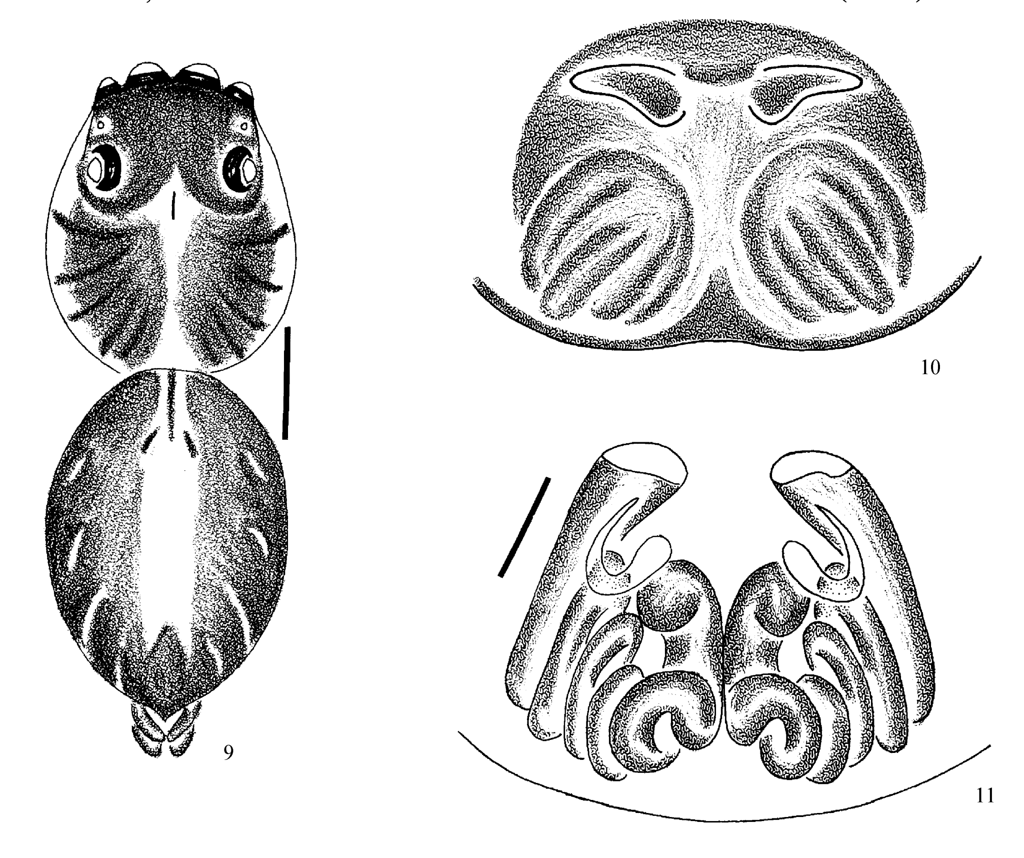
Epigyne. The atrium wide and short (Fig. 11); copulatory openings bilaterally (Fig. 10); copulatory ducts twisted helix-shaped, spermathecae thicker than ducts (Fig. 11).

Male. Unknown.

Etymology. The specific name refers to its similarity to P. *regius* Wesolowska, 1981.

Holotype ♀, China, Hubei Province, Wudang, Nanyan (32°23′N, 110°56′E), 25 Aug. 1983.

Distribution. China (Hubei).



Figs. 9-11. *Plexippoides regiusoides* Peng et Li, sp. nov. 9. Body, dorsal view. 10. Epigynum, ventral view. 11. Vulva, dorsal view. Scale bars: 9 = 1.0, 10-11 = 0.5.

Rhene digitata Peng et Li, sp. nov. (Figs. 12-14)

Diagnosis. This new species is similar to R. *albigera* (C. L. Koch, 1848) (Peng et al., 1993: 198, Figs. 695-699), but can be separated from the latter by: 1) conductor longer, bow-shaped, distal portion needle-shaped (Fig. 13) in the new species; blunt and digit form in R. *albigera*; 2) tibial apophysis longer.

Measurements (holotype). TL 4.60. CL 1.90, CW 1.90; AL 2.70, AW 1.90. AER 1.70, PER 1.80, ELF 1.10, AME 0.37, ALE 0.18, PLE 0.18. CLYH 0.07. Legs Ⅰ lost, Ⅱ 3.25 (1.10, 1.20, 0.55, 0.40), Ⅲ 3.00 (1.00, 1.00, 0.500, 0.50), Ⅳ 3.80 (1.25, 1.35, 0.70, 0.50).

Male. Carapace brown, ocular area dark brown, bases of eyes and the margin black, hairs white and brown; anterior and bilateral of ocular area clothed with white flat short hairs. Sternum ellipsoid and brown, the center somewhat swollen, grayish black; hairs short and blackish brown. Clypeus brown, anterior darker, with darken brown brush-shaped hairs. Chelicerae blackish brown, distal light, with brown hairs, 2 promarginal and 1 retromarginal teeth. Endites and labium blackish brown, distal light brown with floss, labium longer than wide. Legs brown with light spots, short hairs white, long hairs brown, spines weak and sparse. Abdomen oval, dorsum grayish brown, clothed white and brown short hairs; 3 pairs of muscular depressions; lateral area with 4 pairs of arc-shaped stripes formed by white hairs; the venter darken grayish brown. Spinnerets brown, with brown hairs.

Palpal organs (Figs. 13-14). Distal portion of tibial apophysis sharp, curved inward; bulb swollen inferiorly, sperm ducts visible; conductor long, bow-shaped, distal portion sharp and needle-shaped; embolus short and digit form.

Female. Unknown.

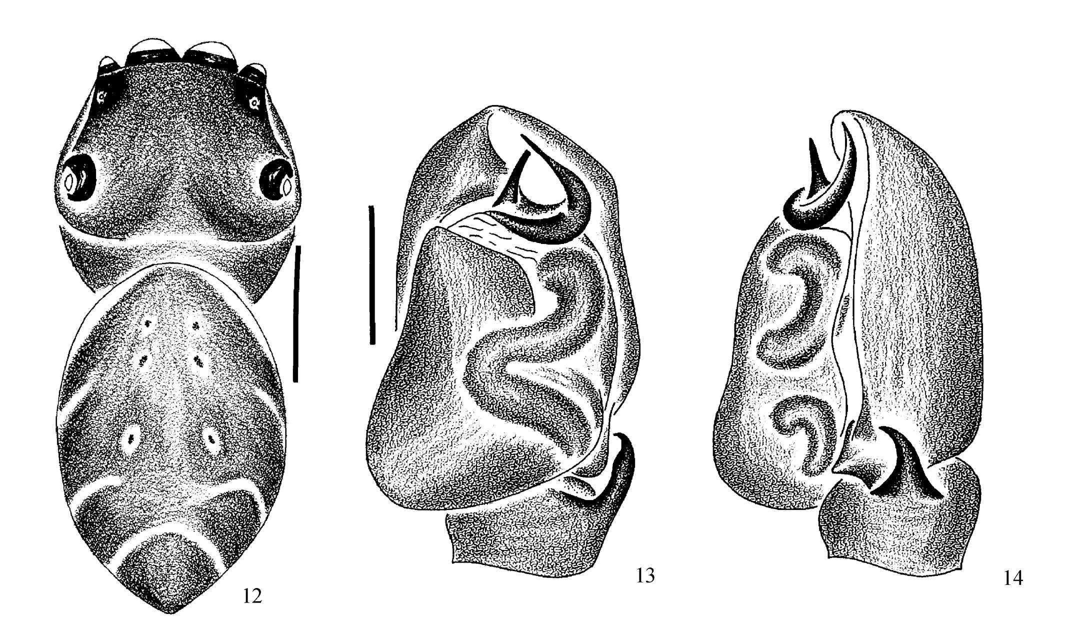
Etymology. The specific name refers to the digit form embolus of male papal organ.

Holotype ♂, China, Hubei Province, Wuxue City (29°51′N, 115°33′E), Wushi, 8 Dec. leg. unknown.

Distribution. China (Hubei).

Synagelides hubeiensis Peng et Li, sp. nov. (Figs. 15-19)

Diagnosis. This new species is similar to S. *agoriformis* Strand, 1906 (Peng et al., 1993: 222,



Figs. 12-14. Rhene digitata Peng et Li, sp. nov. 12. Body, dorsal view. 13. Left palpal organ, ventral view. 14. Left palpal organ, retrolateral view. Scale bars: 12 = 1.0, 13-14 = 0.5.

Figs. 787-794), but can be separated from the latter by: 1) the sclerotized plate beside the embolus complicated, with 3 angular apophyses in ventral view (Fig. 16) in the new species, absent in S. agoriformis; 2) cymbium with a cone-shaped dorsal apophysis in dorsal view (Fig. 18) in the new species, absent in S. agoriformis; 3) abdomen dorsum with distinct zebra-shaped transverse markings (Fig. 15) in the new species, absent in S. agoriformis.

Measurements (holotype). TL 2.70. CL 1.30, CW 0.95; AL 1.40, AW 0.95. AER 0.95, PER 1.00, EFL 0.75, AME 0.33, ALE 0.18, PLE 0.20. CLYH 0.07. Legs: Ⅰ 2.90 (0.90, 1.30, 0.45, 0.25), Ⅱ 2.10 (0.65, 0.75, 0.45, 0.25), Ⅲ 2.10 (0.65, 0.75, 0.50, 0.20). Ⅳ 2.15 (1.00, 1.10, 0.75, 0.30); formula: 1, 4, 3, 2.

Male. Carapace brown, with even granule-shaped small apophyses; only bases of eyes, anterior of ocular area and bilateral with white thin hairs; the bilateral almost parallel; the margin, bases of eyes, anterior of ocular area black; fovea dark brown, U-shaped; cervicle and radial grooves dark, the granule-shaped small apophyses arranged along with cervicle and radial grooves; sternum cordiform, anterior rim straight, much wider than posterior rim, light brown, the anterior half darken, the posterior half with 5 radial stripes. Clypeus brown, anterior rim black, with sparse brown and white hairs. Chelicerae thin, grayish brown, 2 promarginal and 1 retromargin teeth. Endites knife-shaped, grayish brown, inner rim light yellowish brown, with thin light brown hairs. Labium wider than long, darken brown, distal light yellowish brown with brown hairs. Legs light yellow, prolateral with gray longitudinal stripes; hairs sparse, short and thin, tibia Ⅰ with 3 pairs of long ventral spines, metatarsus Ⅰ with 2 pairs of long spines, others without spines. Abdomen (Fig. 15) oval, clothed with sparse hairs; Dorsum light yellowish brown, the anterior with 3 pairs of lighter circular patterns, the median with 2 grayish black arc-shaped transverse stripes; the posterior grayish brown, with 5 thin arc-shaped transverse stripes. The venter yellowish white, 2 wide grayish brown longitudinal stripes in the median. Spinnerets yellowish white, encircled with black loop patterns and sparse short hairs.

Palpal organ. The sclerotized plate beside the embolus complicated, with 3 angular apophyses in ventral view (Fig. 16); Cymbium with a cone-shaped dorsal apophysis in dorsal view (Fig. 18); Embolus long and thin (Figs. 16-17, 19), tibial apophysis invisible (Figs. 16-19).

Female. Unknown.

Holotype ♂, China, Hubei Province, no detailed information.

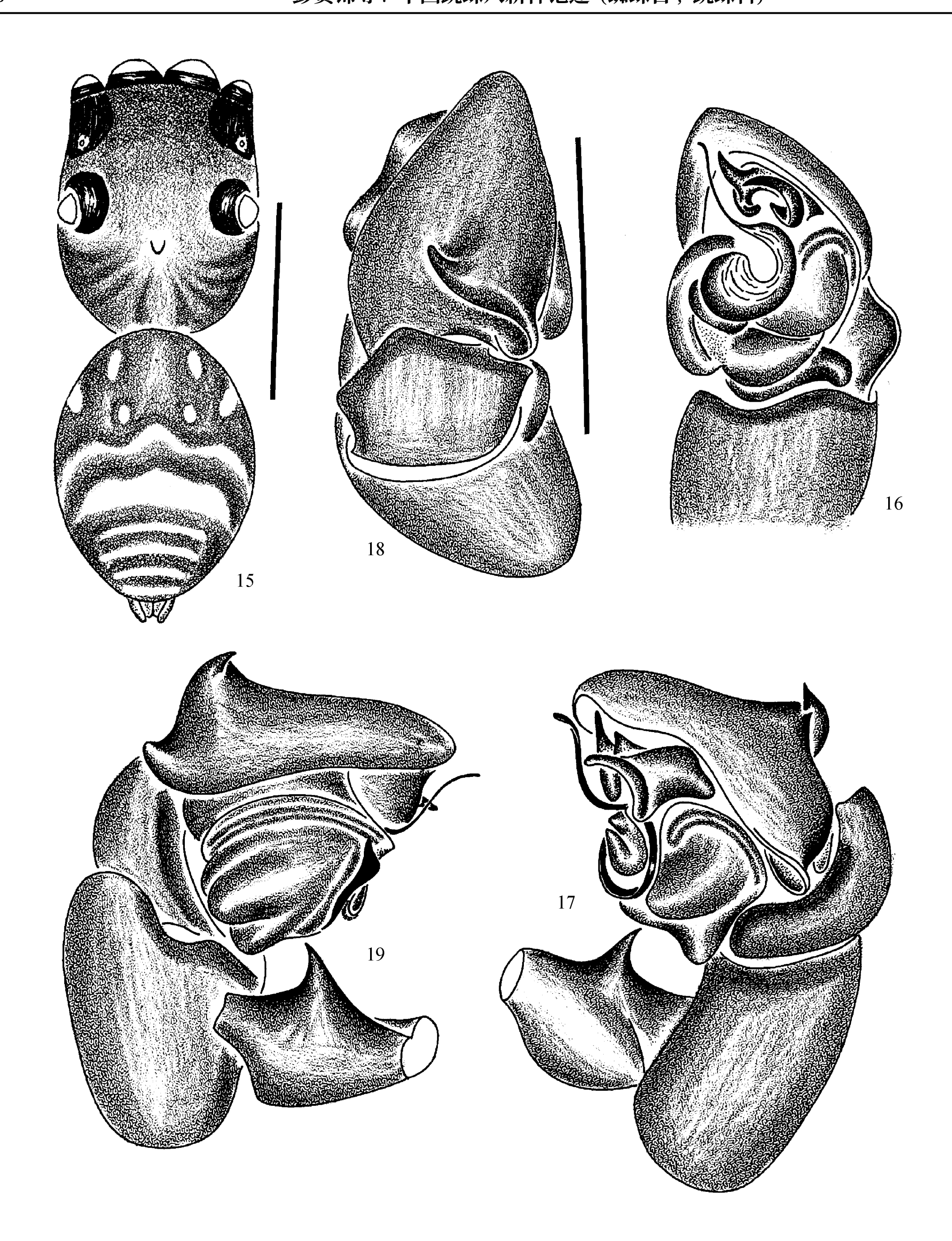
Etymology. The specific name refers to the type locality.

Distribution. China (Hubei).

Synagelides zebrus Peng et Li, sp. nov. (Figs. 20-22)

Diagnosis. This new species is similar to S. annae Bohdanowicz, 1979 (Peng et al., 1993: 224, Figs. 795-800), but can be separated from the latter by: 1) the spermathecae spherical, about as long as wide (Fig. 22) in the new species; oval, two times wider than long in S. annae; 2) the course of copulatory ducts much simpler (Fig. 22); 3) abdomen dorsum with distinct zebra-shaped stripes in the new species, absent in S. annae (Fig. 20).

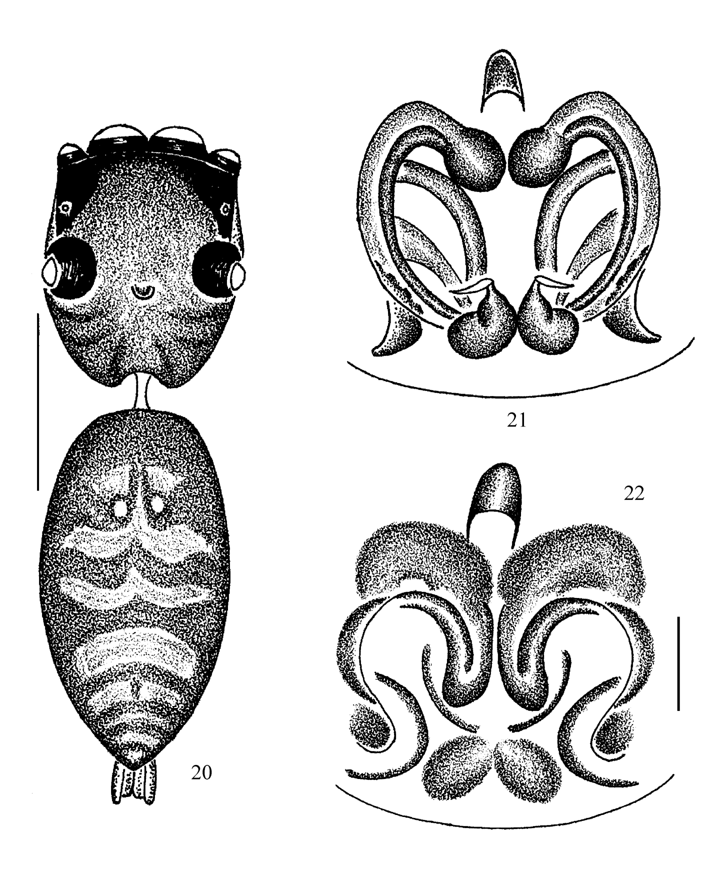
Measurements (holotype): TL 3.80. CL 1.50, CW 1.10; AL 2.10, AW 1.10. AER 1.10, PER 1.15,



Figs. 15-19. *Synagelides hubeiensis* Peng et Li, sp. nov. 15. Body, dorsal view. 16. Left palpal organ, ventral view. 17. Left palpal organ, retrolateral view. 18. Left palpal organ, dorsal view. 19. Left palpal organ, prolateral view. Scale bars: 15 = 1.0, 16-19 = 0.5.

EFL 0.90, AME 0.40, ALE 0.25, PLE 0.25. CLYH 0.05. Legs: Ⅰ 3.45 (1.05, 1.85, 0.30, 0.25), Ⅱ 2.25 (0.70, 0.80, 0.50, 0.25), Ⅲ 2.55 (0.70, 0.95, 0.60, 0.30), Ⅳ 3.55 (0.95, 1.30, 0.85, 0.45); formula 4, 1, 3, 2.

Female. Carapace brown, the bilaterally and posterior half dark brown; bases of eyes, the bilateral and anterior of ocular area black, with short white and brown hairs; carapace with small granules. Fovea small, precurved, black and deep; cervicle and radial grooves black, distinct. Sternum shield-shaped with smooth rim, yellowish brown with grayish black margin, hairs sparse and grayish black. Clypeus narrow and brown, anterior rim grayish black. Chelicerae yellowish brown with grayish black prolateral, 2 promarginal and 1 retromarginal teeth. Palp and legs light yellowish brown with grayish black longitudinal stripes; pro-and retrolateral of femur Ⅰ and ventral of patella Ⅰ grayish black; other legs with long grayish black longitudinal stripes (except tarsus and metatarsus), the bilaterally with long grayish black longitudinal stripes; tibia Ⅰ with 4 long ventral spines on the prolateral, 3 on the retrolateral; metatarsus Ⅰ with 2 pairs of ventral spines; other parts of legs no spines. Abdomen (Fig. 6A)



Figs. 20-22. *Synagelides zebrus* Peng et Li, sp. nov. 20. Body, dorsal view. 21. Epigynum, ventral view. 22. Vulva, dorsal view. Scale bars: 20 = 1.0, 21-22 = 0.5.

cylindrical, dorsum light yellowish brown with dark gray bilaterally, the median with distinct grayish black transverse arc-shaped or sinuate stripes; the venter dark gray bilaterally, median yellowish gray, with 2 dark claviform stripes. Spinnerets grayish brown, with grayish black long hairs.

Epigyne (Figs. 21-22). Epigynal hood anteriorly located; copulatory opening bilaterally located, copulatory ducts slender; the spermathecae spherical, about as long as wide.

Male. Unknown.

Etymology. The specific name refers to the distinct zebra-shaped stripes on the abdomen dorsum.

Holotype ♀, China, Guangxi Zhuang Autonomous Region, Napo County (23°44′N, 106°48′E), Defu Reserve, 1 350 m, 18 June 2000, CG065, leg. CHEN Jun.

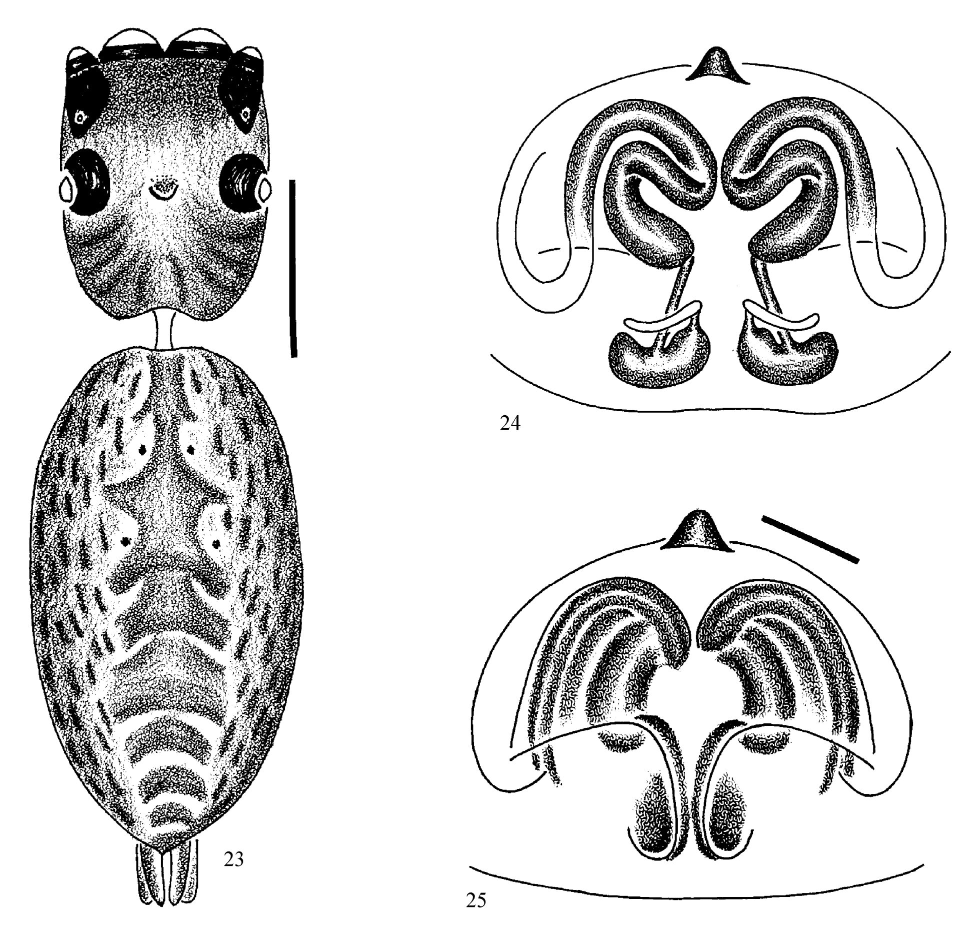
Distribution. China (Guangxi).

Synagelides zonatus Peng et Li, sp. nov. (Figs. 23-25)

Diagnosis. This new species is similar to *S. cavaleriei* (Schenkel, 1963) (Bohdanowicz, 1987: 66, Figs. 1-4), but differs in: 1) spermathecae narrower (Fig. 25); 2) copulatory ducts shorter, twisted in band-shaped (Fig. 25); 3) median septum much shorter (Fig. 24).

Measurements (holotype). TL 4.60. CL 1.60, CW 1.10; AL 2.80, AW 1.55. AER 1.10, PER 1.20, AME 0.37, ALE 0.20, PLE 0.20. CLYH 0.03. Legs: Ⅰ 3.75 (1.05, 1.60, 0.40, 0.25), Ⅱ 2.35 (0.70, 0.90, 0.45, 0.30), Ⅲ 2.50 (0.70, 0.90, 0.60, 0.30), Ⅳ 3.70 (1.00, 1.40, 0.90, 0.40); formula 1, 4, 3, 2.

Female. Carapace brown; margin, bases of eyes and anterior ocular area dark, posterior and median ocular area light brown; clothed with brown small granules; hairs short, white and brown; fovea blackish brown, arc-shaped; cervical and radial grooves clothed with granules and white short hairs. Sternum shield-shaped, light yellowish brown with dark margin; hairs brown, sparse and short. Clypeus brown, dark anteriorly; hairs sparse and darken brown. AER wide, with white short hairs subjacent. Chelicerae light brown, prolateral grayish brown, 2 promarginal and 1 retromarginal teeth small and slim. Endites and labium light brown, the distal lighter, with floss. Palp, legs brown, prolateral with grayish black longitudinal stripes; tibia Ⅰ with 4 pairs of long ventral spines, metatarsus Ⅰ with 2 pairs of long ventral spines, others parts of legs without spine. Abdomen long oval, hairs sparse and short. Dorsum light yellowish white, markings grayish black, 2 pairs of muscular depressions; cardiac pattern



Figs. 23-25. *Synagelides zonatus* Peng et Li, sp. nov. 23. Body, dorsal view. 24. Epigynum, ventral view. 25. Vulva, dorsal view. Scale bars: 23 = 1.0, 24-25 = 0.5.

long stick-shaped; bilateral grayish black. Spinnerets brown with brown hairs.

Epigyne (Figs. 24-25). Epigynal hood anteriorly located; copulatory openings bilaterally located; copulatory ducts slender, twisted and band-shaped; spermathecae small, transverse kidney-shaped.

Male. Unknown.

Etymology. The specific name refers to the form of copulatory ducts.

Holotype ♀, China, Hubei Province, Yingshan County (30°44′N, 115°40′E), 1 July 1984, leg. ZHAO Jin-Zhao.

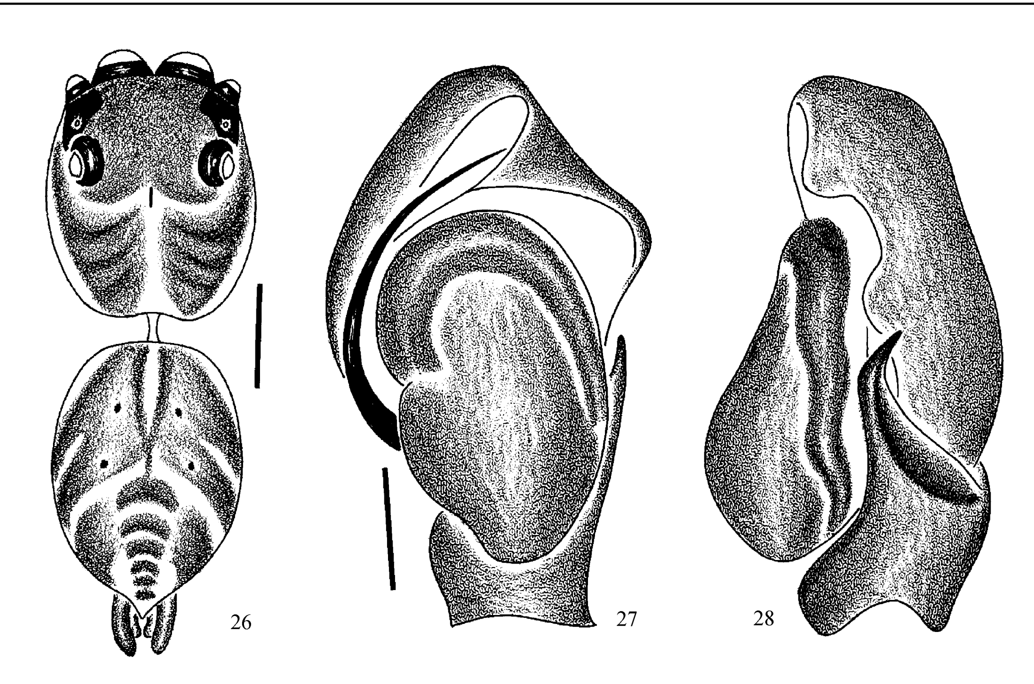
Distribution. China (Hubei).

Yaginumaella bulbosa Peng, Li et Tang, sp. nov. (Figs. 26-28)

Diagnosis. This new species is similar to *Y. tenzingi* Zabka, 1980 (Zabka, 1980: 377, Figs 2, 4, 6, 8, 11, 15, 18), but differs in: the distal portion of the tibial apophysis curved dorsally and digitiform in lateral view in the new species (Figs. 27-28); straight and needlepoint-shaped in *Y. tenzingi*.

Measurements (holotype). TL 5.50. CL 2.50, CW 1.90; AL 2.70, AW 1.70. AER 1.70, PER 1.60, ELF 1.00, AME 0.56, ALE 0.30, PLE 0.30. CLYH 0.13. Legs: Ⅰ 5.50 (1.70, 2.20, 1.00, 0.60), Ⅱ 4.55 (1.50, 1.75, 0.80, 0.50), Ⅲ 5.05 (1.65, 1.70, 1.00, 0.70), Ⅳ 5.30 (1.70, 1.80, 1.20, 0.60); formula 1, 4, 3, 2.

Female. Carapace brown, bilateral and anterior of ocular area dark, with white and brown short hairs; fovea short and longitudinal, reddish brown; cervical and radial grooves darken. Sternum shield-shaped, light yellow, median area bulged, margin smooth, hairs brown; bilateral of clypeus light yellowish brown with white short hairs, median area dark brown with brown long hairs. Chelicerae brown, with brown long hairs, 2 promarginal and 1 retromarginal teeth. Endites with large and deep incision in exterior margin; endites and labium dark brown, distal yellowish brown, with brown floss. Legs light brown, with dark brown annuli and brown thin hairs; spines short, tibiae Ⅰ and Ⅱ with 3 pairs of ventral spines, metatarsi Ⅰ and Ⅱ with 2 pairs of ventral spines. Abdomen (Fig. 26) oval, wider anteriorly; dorsum grayish brown, with sparse brown hairs; cardiac pattern stick-shaped; 2 pairs of muscular depressions visible, reddish brown; the bilateral with 3 pairs of large grayish black spots, the posterior with 6 arc-shaped stripes; venter grayish yellow, with darken grayish thin hairs, median area with dark gray longitudinal stripes,



Figs. 26-28. *Yaginumaella bulbosa* Peng, Li et Tang, sp. nov. 26. Body, dorsal view. 27. Left palpal organ, ventral view. 28. Left palpal organ, retrolateral view. Scale bars: 26 = 1.0, 27-28 = 0.5.

lateral area with sparse grayish black dot spots. Spinnerets grayish brown, with grayish black hairs.

Palpal organ (Figs. 27-28). Tibial apophysis long and narrow, distal portion curved dorsally, digitiform in lateral view; bulb swollen inferiorly, sperm ducts twist around the bulb, embolus slender, needle-shaped.

Female. Unknown.

Etymology. The specific name refers to the form of the bulb of male palpal organ.

Holotype ♂, China, Hubei Province, Wuchang City (30°32′N, 114°17′E), Dongyuan, 6 Nov. 1980, leg. ZHAO Jin-Zhao.

Distribution. China (Hubei).

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中国跳蛛八新种记述（蜘蛛目，跳蛛科）

彭贤锦[1,2]　唐　果[2]　李枢强[1*]

1. 中国科学院动物研究所　北京　100101

2. 湖南师范大学生命科学院　长沙　410081

摘　要　记述了跳蛛科 8 新种，并提供了详细的描述。模式标本保存在中国科学院动物研究所。测量单位 mm。

暗色兰戈纳蛛，新种 Langona atrata Peng et Li，sp. nov.（图 1～4）

正模 ♀，云南苍山东坡，1999 年 6 月 9 日。

正模体长 6.4。头胸部长 3.2，宽 2.4；腹部长 3.6，宽 2.4。前眼列宽 1.7，后眼列宽 1.70，眼域长 1.0，前中眼直径 0.37，前侧眼直径 0.27，后侧眼直径 0.23，额高 0.33。背甲黑褐色，边缘及眼域色深，被有细的白色及黑色毛，此外尚有较多的黑色长毛；边缘有 1 圈白色毛，眼域前部有直立的棒状短毛，颈沟、放射沟及中窝不明显。胸甲瓶状，黑色，被有细长的白毛。额深褐色，前缘黑色，两侧有黑色网纹，被白色细毛及少许黑色长毛。螯肢暗褐色，前侧被有白色细毛，前齿堤 2 齿，后齿堤 1 齿。颚叶浅褐色，端部浅黄色，被褐色绒毛。下唇暗褐色，端部色浅具褐色毛。触肢、步足深褐色，具醒目的黑色环纹及浅色椭圆形斑，被白色及褐色长毛；足刺少而长，胫节 Ⅰ、Ⅱ腹面前侧端部 1 刺、后侧 3 刺，后跗节 Ⅰ无侧刺，后跗节 Ⅱ pr 1-1ap，rt 0-0，后跗节 Ⅰ、Ⅱ腹面具刺 2 对。各步足量度如下：Ⅰ 4.4（1.6，1.7，0.6，0.5），Ⅱ 4.3（1.5，1.7，0.6，0.5），Ⅲ 5.0（2.0，2.0，0.9，1.0），Ⅳ 6.2（1.9，2.1，1.4，0.8）。足式：4，3，1，2。腹部约呈方形，后端稍尖。背面灰黑色，密被灰色及黑色毛，肌痕 2 对，色浅，两侧为深色纵向皱纹，中央有许多深色横向皱纹。腹面黄褐色，中央有 3 条灰黑色纵纹，两侧有许多黑色斜纹。纺器灰黑色，被灰色及黑色长毛。

新种与 L. simoni Heciak & Prozynski，1983（219，figs. 24，30-31）相似，但有以下区别：1）外雌器兜长宽约相等，仅前缘有浅的凹陷；而后者宽远大于长，且明显分为 2 个兜，仅基部相连；2）交媾孔远离兜，而后者则与兜相连；3）交媾管走向不同。与 L. biangula，L. maculata 相比，本种交媾腔几乎纵向，后者与生殖沟呈 45 度角倾斜；交媾管走向及腹部背面斑纹也明显不同。

词源：新种因体色暗而得名。

分布：云南。

陈氏盘蛛，新种 Pancorius cheni Peng et Li，sp. nov.（图 5～8）

正模 ♂，副模1 ♂，广西那坡县德孚保护区，2000 年 6 月 19 日，CG063，海拔1 350 m，陈军采。

体长 4.70～6.00。正模体长 6.2。头胸部长 3.00，宽 2.40；腹部长 3.20，宽 2.00，前眼列宽 1.70，后眼列宽 1.90，眼域长 1.15，前中眼直径 0.55，前侧眼直径 0.30，后侧眼直径 0.30，额高 0.15。雄蛛背甲隆起较高，阔卵形，深褐色，各眼基部黑色，后中眼后方有 1 半月形赤褐色斑，向前延伸环绕眼域外侧；中窝很短，黑色，纵向；颈沟、放射沟不明显；被有少许短的白毛及褐色长毛。胸甲盾形，被有白色及褐色长毛，中央黑褐色，边缘褐色，有黑褐色斑点与各步足基节相对。额褐色，被黑褐色长毛，前中眼下方被有较密的白色长毛。螯肢黑褐色，前侧被有稀疏的白色长毛，螯基布满横向皱折，前齿堤 2 齿、基部相连，后齿堤 1 齿。颚叶、下唇深褐色，端部黄褐色，被灰褐色绒毛。步足黑褐色，有浅褐色环纹；被有较密的黑褐色毛，步足 Ⅰ、Ⅱ腹面的毛呈刷状，足刺较弱而少，胫节 Ⅰ、Ⅱ腹面各 3 对，后跗节 Ⅰ、Ⅱ腹面各 2 对。各步足量度如下：Ⅰ 7.3（2.00，3.10，1.40，0.80），Ⅱ 5.35（1.70，2.00，1.00，0.65），Ⅲ 5.55（1.85，2.00，1.00，0.7），Ⅳ 5.9（1.85，2.00，1.35，0.70）。足式：1，4，3，2。腹部长卵形；背面灰黑色，被灰色细毛；两侧有许多深色斜纹，前端中央有 3 对浅色肌痕，后端中央有 4 条浅色弧纹。腹部腹面灰黑色，中央有 4 行浅色点状纹。纺器灰黑色，被黑色细毛。

新种与 P. crassipes（Karsch，1881）相似，但有以下区别：1）插入器远长于后者，起始于 9：00 处；而后者的则始于 11：00 处，且基部背面有 1 宽的膜质结构；2）身体上的斑纹不同。

新种以模式标本采集者的姓氏命名。

分布：广西。

类王拟蝇虎，新种 Plexippoides regiusoides Peng et Li，sp. nov.（图 9～11）

正模 ♀，湖北武当南岩，1983 年 8 月 25 日。

正模体长 11.8。头胸部长 5.5，宽 4.4；腹部长 6.3，宽 4.4。前眼列宽 2.9，后眼列宽 2.0，前中眼直径 0.95，前侧眼直径 0.45，后侧眼直径 0.45，额高 0.35。背甲褐色，被白色及褐色毛；眼域色深，呈黑褐色，两侧及前缘有褐色长毛；中窝长条状，赤褐色，颈沟、放射沟色深，胸区中央及背甲两侧为深褐色纵带。胸甲盾形，褐色，边缘有深色块斑与各步足基节相对；毛稀少，褐色。额浅褐色，被白色短毛及稀疏的浅褐色长毛。螯肢浅褐色，被浅褐色长毛，前齿堤 2 齿，后齿堤 1 齿。颚叶、下唇褐色，端部色浅，有灰褐色绒毛。步足褐色，基部 3 节色稍浅，被均匀的黑褐色细毛，足刺短而多，胫节 Ⅰ腹面 3 对，胫节 Ⅱ腹面前侧 2 根，后侧 3 根，后跗节 Ⅰ、Ⅱ腹面各具 2 对。各步足量度如下：Ⅰ 9.5（3.0，4.0，1.5，1.0），Ⅱ 8.9（3.0，3.6，1.4，0.9），Ⅲ 9.8（3.2，3.5，2.0，1.1），Ⅳ 10.7（3.2，4.0，2.3，1.2）。足式：4，3，1，2。腹部深赤褐色，被褐色短毛；肌痕 1 对，赤褐色；心脏斑短，细条状；腹部正中有 1 宽的黄褐色纵带，两

* 通讯作者.

侧有 4 对小的浅黄褐斑。腹面正中有 1 宽的黑色纵带，由黑色毛覆盖而成，其上有 2 列浅色小点；两侧黄褐色，散生少许褐色不规则斑。纺器浅黄褐色，被灰黑色细毛。

本种与 P. regius Wesolowska, 1981 相似，但交媾腔宽而短，后者的约呈圆形；交媾管的走向差异明显，腹部背面的斑纹也明显不同。

词源：新种因与 P. regius Wesolowska, 1981 相似，故名类王拟蝇虎。

分布：湖北。

指状宽胸蝇虎，新种 Rhene digitata Peng et Li, sp. nov. (图 12～14)

正模 ♂，湖北武穴市武师，12 月 8 日。

正模体长 4.6。头胸部长 1.9，宽 1.9；腹部长 2.7，宽 1.9。前眼列宽 1.7，后眼列宽 1.8，眼域长 1.1，额高 0.07，前中眼直径 0.37，前侧眼直径 0.18，后侧眼直径 0.18。背甲褐色，眼域色深，各眼基部、背甲边缘黑色；被白色及褐色细长毛，眼域两侧及前缘尚被有短的白色扁平状毛。胸甲椭圆状，褐色，中央稍隆起、灰黑色；被有黑褐色短毛。额褐色，前缘色深；被有暗褐色刷状毛。螯肢深褐色，端部色稍浅；被褐色毛；前齿堤 2 齿较短，后齿堤 1 齿。颚叶、下唇暗褐色，端部浅褐色具绒毛。下唇长条状，长明显大于宽。步足褐色，具浅色斑；足刺少，有少许白色短毛及褐色长毛。各步足量度如下：步足 Ⅰ 缺，步足 Ⅱ 3.25 (1.1, 1.2, 0.55, 0.4)，步足 Ⅲ 3.0 (1.0, 1.0, 0.5, 0.5)，步足 Ⅳ 3.8 (1.25, 1.35, 0.7, 0.5)。腹部卵形，背面灰褐色，被白色及褐色短毛；肌痕 3 对；两侧有 4 对由白毛覆盖而成的弧纹。腹部腹面深灰褐色。纺器褐色，被褐色毛。

新种与 R. albigera (C. L. Koch, 1848) 相似，但有以下区别：1) 引导器长，弓状，远端尖细、呈针状；而后者的则粗短，指状；2) 胫节突明显长于后者。

词源：新种种名来自其指状插入器。

分布：湖北。

湖北合跳蛛，新种 Synagelides hubeiensis Peng et Li, sp. nov. (图 15～19)

正模 ♂，P-295，湖北，地点不详。

正模体长 2.70。头胸部长 1.3，宽 0.95；腹部长 1.4，宽 0.95。后眼列宽 0.95，后眼列宽 1.00，眼域长 0.75，前中眼直径 0.33，前侧眼直径 0.18，后侧眼直径 0.2，额高 0.07。背甲褐色，覆盖有均匀的颗粒状小突起；毛稀少，仅各眼基部、眼域前部及两侧有白色细毛；背甲两侧几乎平行；背甲边缘、各眼基部、眼域两侧及前半黑色；中窝暗褐色，U 字状，凹陷深；颈沟、放射沟色深，颗粒状突起沿颈沟、放射沟呈辐射状排列。胸甲心形，前缘平截状、远宽于后缘，浅褐色，前半色稍深，后半边缘隐约可见 5 条深色放射状条纹。额褐色，前缘黑色，被稀疏的褐色及白色毛。螯肢细弱，灰褐色，前齿堤 2 小齿，后齿堤 1 齿。颚叶刀状，灰褐色，内缘浅黄褐色，被细的浅褐色毛。下唇宽大于长，深褐色，端部浅黄褐色，有褐色毛。步足浅黄色，前侧具有灰色纵条纹，毛稀少、短而细；胫节 Ⅰ腹面有 3 对长刺，后跗节 Ⅰ腹面有 2 对长刺，步足其余各节均无刺。各步足量度如下：步足 Ⅰ 2.9 (0.9, 1.3, 0.45, 0.25)，步足 Ⅱ 2.1 (0.65, 0.75, 0.45, 0.25)，步足 Ⅲ 2.1 (0.65, 0.75, 0.5, 0.2)，步足 Ⅳ 2.15 (1.0, 1.1, 0.75, 0.3)。足式：1, 4, 3, 2。腹部长卵形，毛极少而短。背面浅黄褐色，前端有 3 对浅色斑围以来黑边，中部有 2 条灰黑色弧形横纹；后端灰褐色，其上有 5 条细的浅色弧形横纹。腹部腹面黄白色，中央有 2 条宽的灰褐色纵带。纺器黄白色，围以黑色环纹，毛稀少而短。

新种与 S. agoriformis strand, 1906 相似，但触肢器结构有以下区别：1) 与插入器相伴的骨板结构复杂，腹面观可见多个角状突起，后者的未见明显的角状突；2) 背面观新种跗舟背面中央有 1 锥状突；后者无；3) 腹部背面的斑纹明显不同。

词源：新种的种名来自模式标本产地。

分布：湖北。

斑马合跳蛛，新种 Synagelides zebrus Peng et Li, sp. nov. (图 20～22)

正模 ♀，广西那坡县德孚保护区，海拔1 350 m，2000 年 6 月 18 日，CG065，陈军采。

正模体长 3.80。头胸部长 1.50，宽 1.10；腹部长 2.10，宽 1.10。前眼列宽 1.10，后眼列宽 1.15，眼域长 0.90，额高 0.05，前中眼直径 0.40，前侧眼直径 0.25，后侧眼直径 0.25。背甲褐色，两侧及后半部暗褐色，各眼基部、眼域两侧及前缘黑色；被有短的白色及褐色毛；整个背甲布满小颗粒状突起，中窝小，前凹，黑色，较深；颈沟，放射沟黑色，清晰可见。胸甲盾形，边缘光滑；黄褐色，边缘灰黑色，被有稀疏的灰黑色毛。额极狭，褐色，前缘灰黑色。螯肢黄褐色，前侧灰黑色，前齿堤 2 齿，后齿堤 1 齿。触肢、步足黄褐色，具灰黑色纵条纹；腿节 Ⅰ的前、后侧、膝节的 Ⅰ腹面灰黑色；其余步足各节 (端部两节除外) 两侧有长的灰黑色纵条纹；步足仅胫节 Ⅰ及后跗节 Ⅰ具刺，其中胫节 Ⅰ腹面前侧具 4 根长刺，后侧 3 根，后跗节 Ⅰ腹面 2 对；各步足量度如下：步足 Ⅰ 3.45 (1.05, 1.85, 0.30, 0.25)，步足 Ⅱ 2.25 (0.70, 0.80, 0.50, 0.25)，步足 Ⅲ 2.55 (0.70, 0.95, 0.60, 0.30)，步足 Ⅳ 3.55 (0.95, 1.30, 0.85, 0.45)。足式：4, 1, 3, 2。腹部筒状，背面浅黄褐色，两侧深灰色，中央有醒目的灰黑色横向弧形纹或波状纹；腹面两侧深灰色，中央黄灰色，具 2 条深色棒状纹。纺器灰褐色，被灰黑色长毛。

新种与 S. annae Bohdanowicz, 1979 相似，但有以下区别：1) 纳精囊近球形，长宽约相等；后者的则卵形，宽约为长的 2 倍；2) 交媾管的缠绕方式远没有后者的复杂；3) 腹部背面有醒目的斑马状横带。

词源：新种因腹部背面有醒目的斑马状横带而得名。

分布：广西。

带状合跳蛛，新种 Synagelides zonatus Peng et Li, sp. nov. (图 23～25)

正模 ♀，P-296，湖北应山溪丛，1984 年 7 月 1 日。

正模体长 4.6。头胸部长 1.6，宽 1.1；腹部长 2.8，宽 1.55。前眼列宽 1.1，后眼列宽 1.2，前中眼直径 0.37，前侧眼直径 0.2，后侧眼直径 0.2，眼域长 0.9，额高 0.03。背甲褐色，边缘、各眼基部及眼域前缘黑色，眼域后部及中央浅

褐色，布满褐色小颗粒状突起，被白色及褐色短毛；中窝黑褐色，弧状；颈沟、放射沟上覆盖有颗粒状突起及白色短毛。胸甲盾形，前缘宽而呈平截状；浅黄褐色，边缘深褐色；褐色毛稀少而短。额褐色，前缘色深；被稀疏的深褐色粗毛，前眼列宽、下方有白色短毛。螯肢浅褐色，前侧灰褐色；前齿堤 2 齿，后齿堤 1 齿，齿小而细弱。颚叶、下唇浅褐色，端部色浅有绒毛。触肢、步足褐色，前侧有灰黑色纵条纹；胫节 Ⅰ腹面有 4 对长刺，后跗节 Ⅰ腹面有 2 对长刺，步足其余各节均无刺。各步足量度如下：步足 Ⅰ 3.75（1.05，1.6，0.4，0.25），步足 Ⅱ 2.35（0.7，0.9，0.45，0.30），步足 Ⅲ 2.5（0.7，0.9，0.6，0.3），步足 Ⅳ 3.7（1.0，1.4，0.9，0.4）。足式：1，4，3，2。腹部长卵形，毛稀少而短。背面浅黄白色，斑纹灰黑色，肌痕 2 对；心脏斑长棒状；两侧灰黑色。纺器褐色，被褐色细毛。

新种与 S. cavaleriei（Schenkel，1963）相似，二者区别如下：1）纳精囊较狭；2）交媾管较短，缠绕简单，呈飘带状；3）生殖厣的中隔远短于后者。

词源：新种雌蛛交媾管较短，缠绕简单，呈飘带状，故名带状合跳蛛。

分布：湖北。

球状雅蛛，新种 Yaginumaella bulbosa Peng，Li et Tang，sp. nov.（图 26～28）

正模 ♂，P-294，湖北东园，1980 年 11 月 6 日。

正模体长 5.50。头胸部长 2.5，宽 1.90；腹部长 2.7、宽 1.70。前眼列宽 1.7，后眼列宽 1.6，眼域长 1.0，前中眼直径 0.56，前侧眼直径 0.3，后侧眼直径 0.3，额高 0.13。背甲褐色，边缘、眼域两侧及前缘黑色；被白色及褐色短毛；中窝短、纵条状，赤褐色；颈沟、放射沟色深。胸甲盾形，中央隆起，边缘光滑；被褐色毛，中央浅黄褐色，边缘色深。额两侧浅黄褐色，被白色短毛；中央深褐色，被褐色长毛。螯肢褐色，被褐色长毛，前齿堤 2 齿，1 大 1 小，后齿堤 1 大齿。颚叶外缘有大而深的缺刻。颚叶、下唇深褐色，端部黄褐色，有褐色绒毛。步足浅褐色，有深褐色轮纹，被褐色细毛；足刺短而多，胫节 Ⅰ、Ⅱ腹面有刺 3 对，后跗节 Ⅰ、Ⅱ腹面有刺 2 对。各步足量度如下：步足 Ⅰ 5.5（1.7，2.2，1.0，0.6），步足 Ⅱ 4.55（1.5，1.75，0.8，0.5），步足 Ⅲ 5.05（1.65，1.7，1.0，0.7），步足 Ⅳ 5.3（1.70，1.8，1.2，0.6）。足式：1，4，3，2。腹部卵形，前缘稍宽。背面灰褐色，被稀疏的褐色毛；心脏斑棒状；肌痕 2 对，赤褐色；两侧有 3 对大的灰黑斑，中央后端由 6 个弧形纹。腹面灰黄色，被深灰色细毛；中央隐约可见深灰色纵带，两侧散生灰黑色点状斑。纺器灰褐色，被灰黑色毛。

新种与 Y. tenzingi Zabka，1980 相似，

但胫节突的形状明显不同，侧面观新种的胫节突端部弯向背侧、呈指状；后者则不弯曲，末端针尖状。

词源：新种因生殖球几乎呈球状。故名球状雅蛛。

分布：湖北。

关键词　跳蛛科，新种，分类学，中国.
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